

Listing of Claims:

1. (Currently Amended) An optoelectronic semiconductor component having a thin-film semiconductor body arranged on a carrier of the optoelectronic semiconductor component, wherein the carrier contains germanium,
a metallic mirror layer is arranged between the thin-film semiconductor body and the carrier, and
wherein a dielectric layer is at least partially arranged between the thin-film semiconductor body and the metallic mirror layer.
2. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body is soldered onto the carrier.
3. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body is soldered onto the carrier by a gold-containing solder.
4. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body comprises a plurality of individual layers.
5. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 4, wherein the thin-film semiconductor body or at least one of said plural individual layers contains a type III-V compound semiconductor.

6. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 5, wherein the thin-film semiconductor body or at least one of said plural individual layers contains $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{P}$, $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$.

7. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 5, wherein the thin-film semiconductor or at least one of said plural individual layers contains $\text{In}_x\text{As}_y\text{Ga}_{1-x-y}\text{P}$, $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$.

8. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 5, wherein the thin-film semiconductor body or at least one of said plural individual layers contains $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{As}$ where $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$ or $\text{In}_x\text{Ga}_{1-x}\text{As}_{1-y}\text{N}_y$ where $0 \leq x \leq 1$, $0 \leq y \leq 1$.

9. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 5, wherein the thin-film semiconductor body or at least one of said plural individual layers contains a nitride compound semiconductor.

10. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body has a radiation-emitting active region.

11. - 12. (Canceled)

13. (Previously Presented) A method for producing an optoelectronic semiconductor component having a thin-film conductor body arranged on a carrier, comprising the steps of:

- a) growing the thin-film semiconductor body on a substrate;
- b) applying a dielectric layer at least partially to a side of the thin-film semiconductor body which is remote from the substrate;
- c) applying a metallic mirror layer on the dielectric layer;
- b) d) applying the carrier to the metallic mirror layer; and a side of the thin-film semiconductor body that is remote from the substrate; and
- e) e) stripping the thin-film semiconductor body from the substrate;
wherein the carrier contains germanium.

14. (Previously Presented) The method as claimed in claim 13, wherein the substrate is eroded away in step c).

15. (Previously Presented) The method as claimed in claim 13, wherein the semiconductor body is stripped from the substrate by laser irradiation in step c).

16. (Previously Presented) The method as claimed in claim 13, wherein the carrier is soldered on in step b).

17. (Previously Presented) The method as claimed in claim 13, wherein a gold layer is arranged on at least one of that side of the thin-film semiconductor body which faces the carrier and on that side of the carrier which faces the thin-film semiconductor body, and wherein said

gold layer, when the carrier is soldered on in step b), at least partially forms a melt containing gold and germanium.

18. (Previously Presented) The method as claimed in claim 13, wherein prior to step b), a layer containing gold and germanium is applied on at least one of that side of the thin-film semiconductor body which faces the carrier and on that side of the carrier which faces the thin-film semiconductor body.

19. (Previously Presented) The method as claimed in claim 13, for producing an optoelectronic semiconductor component having a thin-film body arranged on a carrier that contains germanium.

20. (Previously Presented) The semiconductor component as claimed in claim 1, wherein the semiconductor component is a luminescence diode.

21. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 20, wherein the semiconductor component is a light emitting diode or a laser diode.

22. (Previously Presented) The method as claimed in claim 13, wherein the optoelectronic semiconductor component is a luminescence diode.

23. (Previously Presented) The method as claimed in claim 22, wherein the optoelectronic semiconductor component is a light-emitting diode or a laser diode.

24. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 9, wherein the thin-filmed semiconductor body or at least one of the individual layers contains a nitride compound semiconductor in accordance with the relationship $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$, $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$.

25. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 11, wherein the mirror layer comprises a metallic mirror layer.

26. (Previously Presented) The method as claimed in claim 14, wherein the substrate is eroded away in step c) by at least one of grinding and etching.

27. (Previously Presented) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body is a thin-film luminescence diode chip.

28. (Previously Presented) The method as claimed in claim 13, wherein the thin-film semiconductor body is a thin-film luminescence diode chip.

29. (New) The optoelectronic semiconductor component as claimed in claim 1, wherein the thin-film semiconductor body is soldered onto the carrier by a gold-containing solder, and wherein a gold-germanium eutectic is formed between the carrier and the thin-film semiconductor body.

30. (New) The method as claimed in claim 13, wherein the thin-film semiconductor body is soldered onto the carrier by a gold-containing solder, and wherein a gold-germanium-eutectic is formed between the carrier and the thin-film semiconductor body.